

U.S. Department of Energy and Lawrence Berkeley National Laboratory

2022 Efficient and Healthy Schools Webinar Series

Webinar 2 of 4: HVAC Inspection and Maintenance for IAQ

May 20th 10:00 am Pacific | 1:00 pm Eastern 11:00 am Mountain | 12:00 pm Central

Registration Link

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Webinar Objectives

- Provide access to experts, tools, and resources to get started or further improve school HVAC inspection and maintenance practices for indoor air quality and energy efficiency.
- Share energy efficiency and indoor air quality (IAQ) best practices, and promote peer learning and technical exchange, among schools and stakeholders.

Webinar Agenda

Time	Title	Speakers	
Welcome and Opening Remarks			
[1 minute]	Welcome, logistics, and today's agenda	Carolyn Szum, Program Manager, Lawrence Berkeley National Laboratory (LBNL)	
[5 minutes] 10:00 - 10:05 AM PDT 1:00 - 1:05 PM EDT 11:00 - 11:05 PM MDT 12:00 - 12:05 PM CDT	Opening remarks	Tracy Enger, Program Manager, U.S. Environmental Protection Agency (EPA)	
[5 minutes] 10:05 - 10:10 AM PDT 1:05 - 1:10 PM EDT 11:05 - 11:10 PM MDT 12:05 - 12:10 PM CDT	Introduction to the Efficient and Healthy Schools Campaign	Rengie Chan, Research Scientist, LBNL	
Presentations: HVAC Inspection and Maintenance for IAQ			
[10 minutes] 10:10 - 10:20 AM PDT 1:10 - 1:20 PM EDT 11:10 - 11:20 PM MDT 12:10 - 12:20 PM CDT	Utilizing State Programs for Excellence in IAQ	Rodney Williams, Director of Energy and Sustainability, Newark Board of Education, NJ Best in Class, Awardee	

[10 minutes] 10:20 - 10:30 AM PDT 1:20 - 1:30 PM EDT 11:20 - 11:30 PM MDT 12:20 - 12:30 PM CDT	Implementing HVAC Replacement and Filtration Upgrade	Linda Mayfield, Director of MOTFW, Mariposa County Unified School District, CA Notable Achievement, Awardee	
[10 minutes] 10:30 - 10:40 AM PDT 1:30 - 1:40 PM EDT 11:30 - 11:40 PM MDT 12:30 - 12:40 PM CDT	Ventilation Verification - HVAC Assessment	Christopher Ruch, Director of Education, National Energy Management Institute	
Q&A and Closing			
[10 minutes] 10:40 - 10:50 AM PDT 1:40 - 1:50 PM EDT 11:40 - 11:50 PM MDT 12:40 - 12:50 PM CDT	Q&A section	Rengie Chan, LBNL, moderator	
[10 minutes] 10:50 - 11:00 AM PDT 1:50 - 2:00 PM EDT 11:50 - 12:00 PM MDT 12:50 - 1:00 PM CDT	Closing remarks: -Join the campaign -Department of Energy's Better School Infrastructure Program	Rengie Chan, LBNL	

Speaker Bios

Featured Districts



Rodney L. Williams, SFP, CEFM: Serving 35 years working for New Jersey public schools, Rodney Williams is a sustainability leader who has made immeasurable contributions to advancing solutions in school facilities that save energy and money. Rodney is currently the Director of Energy and Sustainability for the Newark Public Schools' Office of Facilities Management. From 2017-19, the district saved nearly \$1.9 million from energy efficiency projects. Rodney's technological knowledge and strategic approach has reduced the district's carbon footprint while enabling Newark Public Schools, the state's largest school district, to become innovators using school facilities to promote green technology in the building, classrooms and the community. Rodney is also a certified Sustainable Facilities Professional (SFP) with the International Facilities

Management Association, an accomplishment of which he is proud.



Linda Mayfield is the Director of MOTFW at Mariposa County Unified School District. Linda has her AA degree from Merced College in Business Administration, and BS degree from Sacramento State in Business Administration. Linda is also a cabinet member, 7-11 committee member, and CBOC member. The District has eight schools and one charter school where she has implemented energy efficiency district wide. Linda's goal is to make every classroom in every school a healthy safe environment for the students and staff.

Experts and Supporting Team



Christopher Ruch is the Director of Education for the National Energy Management Institute. As a graduate of the Sheet Metal Workers apprenticeship program, Christopher has spent the majority of his career in the field specializing in Testing, Adjusting, and Balancing (TAB) Heating, Ventilation, and Air Conditioning (HVAC) Systems.



Tracy Washington Enger has worked for the U.S. Environmental Protection Agency in the Office of Air since 1994. In her current position in the Indoor Environments Division, she develops, promotes and implements education and outreach programs that protect public health from indoor environmental pollutants. She has worked for 20 years on building capacity for school districts across the country to create greener, cleaner, healthier learning environments by implementing the EPA Indoor Air Quality Tools for Schools (IAQ TfS) Action Kit. In addition to the IAQ TfS Action Kit itself, she has been instrumental in the development of a suite of products to assist schools in taking action to address IAQ issues, including newly developed guidance documents on preventative

maintenance, websites, National and regional in-person training events, and series of professional training webinars.



Dr. Wanyu (Rengie) Chan is a Research Scientist and Deputy Indoor Environment Group Leader in Energy Analysis and Environmental Impact Division at Lawrence Berkeley National Laboratory. Her work focuses on characterizing indoor air quality and implications to human exposures in residential and commercial buildings. She recently completed a research project studying indoor air quality and ventilation in California classrooms, working in collaboration with UC Davis Western Cooling Efficiency Center. Dr. Chan serves as the point of contact for the Efficient and Healthy Schools Campaign. She also manages the USEPA sponsored iaqscience website that summarizes the state of knowledge on indoor air quality and health. Dr. Chan earned her Ph.D. in Civil and Environmental Engineering from University of California, Berkeley in 2006.



Carolyn Szum is a Program Manager at Lawrence Berkeley National Laboratory with 17 years of experience leading and managing domestic and international building energy efficiency market transformation initiatives, with specialized focus on building energy performance benchmarking and climate finance. Prior to joining Berkeley Lab, Ms. Szum was a Lead Managing Consultant at ICF where she supported the U.S. Environmental Protection Agency's (EPA) domestic and international building energy efficiency programs, ENERGY STAR and eeBuildings. She has an M.A. in International Relations from The Fletcher School of Law and Diplomacy at Tufts University. She also holds a B.A. in International Studies and Business, Phi Beta Kappa, magna cum laude, from Colby College.